

NOTES FROM THE HERBARIUM OF THE UNIVERSITY OF
WISCONSIN—IX¹

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ONE of the most valuable recent works on the flora of the Middle West is, without any doubt, the *Annotated Flora of the Chicago Area*, by Dr. H. S. Pepon. It is not in a spirit of petty fault-finding, for it is easy to pick flaws once the work is done, but rather in recognition of its excellence and in an effort to render it more useful to botanists in general that the following facts are recorded.

One of the names most frequently appearing in this work is that of Professor Levi M. Umbach; and well it may be, for the late Professor Umbach collected, between the years 1895 and 1914, more than 14,000 numbers, most of them in the Chicago area. His herbarium is now incorporated with that of the University of Wisconsin.

Of the 1908 species and varieties recorded by Pepon many seem to have been included entirely on the authority of Umbach, and in the majority of these cases specimens can be found which obviously form the bases of these reports. For example, *Oxybaphus hirsutus* is recorded as follows: "C. B. & Q. Ry. near Lisle, occasional specimens. (Umbach)." In the herbarium are found two specimens with the following data, respectively: "On ballast, Lisle, Ill., July 14, 1900, L. M. Umbach," and "Along R. R., Lisle, Ills., Aug. 12, 1907, L. M. Umbach." Again, *Vernonia noveboracensis* is listed with the following comment: "Low ground near streams, not common. Romeo. Clarke. (Umbach). It is decidedly doubtful about the occurrence of this plant in our area, yet Prof. Umbach was a very careful and skilled botanist." There is no material so named from Romeo and Clarke; still, since there are specimens labelled *V. noveboracensis* from Palos Park and Naperville, Illinois, from Millers, Indiana, and from Magician Lake, Michigan, none of which are *V. noveboracensis*, we may conclude that the report is erroneous.² On the other hand, there are many of these reports for which no substantiating specimen can be found among Umbach's collections.

Of the 82 species and varieties included entirely on the authority of Umbach, the following must be reconsidered in the light of incorrectly determined specimens.³

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² Cf. Gleason, *Torreyia* xxviii. 9 (1928).

³ Since the Flora is based primarily upon ed. 7 of Gray's Manual, such changes as would result from altered concepts resulting from systematic or nomenclatorial research since 1908 are not considered here.

ASPIDIUM SIMULATUM Davenp. "Tolleston, in boggy woods, 1909. (Umbach)." A specimen labelled, "*Aspidium simulatum* Davenp. Swamp, Tolleston, Ind., no. 5013, Sept. 18, 1909" is *A. Thelypteris* of Gray's Manual, ed. 7 (*Thelypteris palustris* (Salisb.) Schott, var. *pubescens* (Lawson) Fernald) as is evidenced by the forked veins of the segments of the sterile fronds, and by the long-ciliate and somewhat glandular indusia.¹

ARISTIDA INTERMEDIA Scribn. & Ball. "Miller and Dune Park. (Umbach) Not common." A specimen from Miller, Oct. 1, 1898, is correctly determined as *A. intermedia*; one from Dune Park, no. 1503, labelled *A. intermedia*, is *A. purpurascens* Poir., and was so marked by C. C. Deam in 1928.

BROMUS HORDEACEUS L. "Railroads at Clarke and Miller, Ind. (Umbach)." Specimens, so labelled, from moist sands, Clarke, Ind., June 17, 1899, and from swales, Miller, June 24, 1898, have both been marked *B. commutatus* Schrad., by C. C. Deam.

AGRIMONIA ROSTELLATA Wallr. "Alluvial soil, Naperville, 1912. (Umbach)." Umbach's no. 6281, ravine, Naperville, Ill., Sept 6, 1912, so identified, is *A. mollis* (T. & G.) Britton. The stem and leaves are soft-pubescent, and the hypanthium is deeply furrowed, with hooks equalling the calyx-lobes in length.

OXALIS FILIPES Small. "Calumet Heights, '06. Porter, '12. Wheatland, '16. (Umbach)." A sheet labelled, "*Oxalis filipes* Small, along R. R., Calumet Heights, Ind., no. 957, May 30, 1906" is *O. stricta* L. There is no specimen called *O. filipes* from Porter. One labelled, "*Oxalis filipes* Small, roadside, Wheatland, Ill., no. 6148, Aug. 26, 1912" is *O. europaea* Jord., or according to Gray's Manual, ed. 7, *O. corniculata*.

CALLITRICHE DEFLEXA AUSTINI (Engelm.) Heg. "Wet soil of Skokie Marsh. (Umbach)." A specimen named *Callitriche Austini* Engelm., from Skokie, Highland Park, Ill., June 9, 1900, is *C. heterophylla* Pursh. The upper leaves are obovate and have minute scales, while the lower, apparently submerged, leaves are very narrow; the wingless fruit is clearly that of *C. heterophylla*.

NYSSA SYLVATICA BIFLORA (Walt.) Sarg. "Moist margins of swamps. Dune Park, 1912. Rare. (Umbach)." Two sheets of apparently typical *N. sylvatica* collected in Dune Park in 1900 and 1912 are determined correctly. A sheet from Port Chester named *N. sylvatica* var. *biflora*, and one from Miller labelled *N. aquatica* are, as far as the present writer can see, ordinary *N. sylvatica*.

TEUCRIUM CANADENSE LITTORALE (Bick.) Fernald. "Naperville, 1912. (Umbach)." Umbach's no. 5664, from Naperville, Ill., July 15, 1912, identified as this, is *T. occidentale* Gray, as is evidenced by the villous pubescence and long-stipitate glands on the calyx.

STACHYS CORDATA Riddell. "Romeo, 1907, in moist soil, rare. (Umbach)." A specimen labelled, "*Stachys cordata* Riddell, banks,

¹ See RHODORA xxxi. 29 (1929).

Romeo, Ills., no. 1897, Aug. 7, 1907" is not that species, for the sides of the stem are perfectly glabrous; it is rather *S. tenuifolia* Willd., var. *aspera* (Michx.) Fernald.

PHYSALIS BARBADENSIS Jacq. "Along the Alton Ry. at Brighton Park, '96 and '98. (Umbach)." Two specimens, one from dumping ground, Brighton Park, Chicago, Ill., Aug. 17, 1897, and the other from waste ground, Chicago, Ill., Aug. 3, 1897, have each been marked *P. angulata*, then *P. barbadensis*. Both have short deltoid calyxlobes quite unlike those of the latter species. The peduncles are 3–5 cm. long in fruit; the plants may be *P. pendula* Rydb.

PHYSALIS ALKA-KENGI L. "Persisting in gardens in Naperville; also in a few fields. (Umbach)." There are two collections; one is from gardens, Naperville, Aug. 20, 1898, and the other is cultivated, Naperville, Sept. 4, 1895. Only the former shows underground parts; there is a slender tap-root with no rootstocks whatever. The plants are perhaps *P. pruinosa* L., for the leaves are thick, heavy-pubescent, and coarsely dentate to the cordate base.

VERNONIA NOVEBORACENSIS Willd. "Romeo. Clarke. (Umbach)." Three sheets bearing this name are from Palos Park, Ill., Miller, Ind., and Magician Lake, Mich., while one from Naperville is named *V. noveboracensis* var. *latifolia*. None have filiform tips on the involucre bracts; they are *V. missurica* Raf.¹

VERNONIA GLAUCA (L.) Willd. "Low ground, Palos Park and Naperville. (Umbach)." There is no material so labelled from Naperville; two sheets from Palos Park which bear this name are *V. missurica*.

The genus *Vernonia* as represented in this region by the Umbach collections consists of *V. missurica*, *V. fasciculata*, and *V. Baldwini*; the last-named, not listed by Pepon, is represented by a single collection at Beach, Ill., Sept. 2, 1908.

HIERACIUM MARIANUM Willd. "Open dry places near Gary and at Port Chester. (Umbach)." There are eight collections by Umbach identified as this species. A number from Gary, Dune Park, Clarke, and Miller, Ind., and three sheets from Magician Lake, Mich., have the elongated inflorescence and stellate pubescence of *H. Gronovii* L. One sheet from Port Chester, Ind., called *H. marianum*, is *H. scabrum* Michx.

There are 181 records based in part upon specimens of Umbach, and in part upon some other authority. Some of these may be open to question, being, as far as the Umbach records go, based upon misdeterminations.

PANICUM BOREALE Nash. "Moist open swales, southeast of Miller, along the B. & O. Ry. Abundant locally. (Pepon, Umbach)." Also on the authority of Hill. The plant so labelled, from swales,

¹ Including *V. illinoensis* Gleason; see N. Am. Flora xxxiii. pt. 1: 91 (1922).

Miller, Ind., June 24, 1898, has been determined as *P. spretum* Schult., by Hitchcock and Chase. However, *P. boreale* is in the region (see Deam, Grasses of Indiana, p. 266).

RYNCHOSPORA CORNICULATA (Lam.) Gray. "Marsh borders northeast of Dune Park, and eastward. (Umbach, Pepoon)." Three sheets, collected Sept. 2, 1898, July 24, 1906, and Sept. 4, 1906, at Dune Park, and named *R. corniculata*, have bristles exceeding the achene, and are *R. macrostachya* Torr.

SCLERIA PAUCIFLORA Muhl. "Miller. (Umbach)." Also on the authority of Hill. Two collections so identified from Miller, and three from Dune Park, have the pubescence which places them with *S. pauciflora* var. *caroliniana* (Willd.) Wood.

TALINUM TERETIFOLIUM Pursh. "Sandy hills, Miller and vicinity, rare. (Umbach, Pepoon)." The material is *T. rugospermum* Holzinger, which species is also reported on the authority of Umbach. *T. teretifolium* does not occur in the region.¹

AGRIMONIA GRYPOSEPALA Wallr. "Thickets, Wheatland, 1909. (Umbach) Clarke, Ind. More common southeast." Umbach's no. 4030, from Wheatland, Ill., determined as this, is *A. mollis* (T. & G.) Britton. True *A. gryposepala* is represented, however, by collections from Beach, Downers Grove, Warrenville, Sag, Orland and Palos Park, Ill., and from Clarke, Ind.

VITIS CINEREA Engelm. "In a tamarack marsh two miles east of Miller, Ind. Only a few vines. (Umbach, Pepoon)." A specimen from Miller, given this name, is *V. labrusca* L.

GERARDIA PEDICULARIA L. This is listed as a common plant, while the variety *ambigens* Fernald is recorded only from Clarke, on the authority of Umbach. Actually, all the Umbach collections from the area, mostly determined as typical *G. pedicularia*, are the variety. Peattie, in the Flora of the Indiana Dunes, lists only the variety.

GERARDIA LAEVIGATA Raf. "Dune Park. (Umbach) 1906. South Chicago. (Babcock)." The plant labelled, "*Dasystoma laevigata* Raf., woods, Dune Park, Ind., no. 1437, Sept. 4, 1906" is the plant called *G. virginica* (L.) BSP. in Gray's Manual, ed. 7.

VERNONIA ALTISSIMA Nutt. "Moist thickets and slough borders, Dune Park. (Hill) Porter, Ind., 1912 (Umbach)." A sheet so determined, from fence rows, Porter, Ind., no. 6130, Aug. 20, 1912, is *V. missurica* Raf., as are others from Mt. Tom and Syracuse, Ind., also called *V. altissima*. A sheet so identified, from Lisle, Ill., is *V. fasciculata* Michx. *V. altissima* is reported from the area by Peattie, Flora of the Indiana Dunes, on the authority of Judge J. R. Churchill.

SOLIDAGO ARGUTA Ait. "Pine and Miller, Ind., very rare. Dune Park and Clarke. (Umbach) This is a questionable station for the species." Specimens so named from Dune Park and Clarke have the leaves very scabrous above, and are *S. patula* Muhl.

ASTER PATENS Ait. "Big woods at Evanston. (Raddin). War-

¹ See RHODORA xxx. 205-206 (1928).

renville. (Umbach).” A specimen so named, from Warrenville, is *A. laevis* L.

LACTUCA FLORIDANA (L.) Gaertn. “Low rich thickets, occasional. Common southeast. Beach near Waukegan. (Umbach).” There is no sheet so named and labelled Waukegan; one from Beach, Ill. (a station near Waukegan, apparently the location in question) is *L. ludoviciana* (Walt.) Riddell. Specimens labelled *L. floridana*, from Naperville, Sag, and Riverside, Ill., are all *L. villosa* Jacq.

MADISON, WISCONSIN.

RECENT DISCOVERIES IN THE NEWFOUNDLAND FLORA

M. L. FERNALD

(Continued from page 185)

NARDUS STRICTA L. The Newfoundland record has rested upon *Robinson & Schrenk*, no. 209, from rocky banks of Rennie’s River, St. John’s. Mrs. Ayre now sends material from the Newtown Marsh near St. John’s, as also from Quidi Vidi and banks of Waterford River—all in the same general area; also from the marshes of Beaver Pond, Salmonier.

*AVENA FATUA L. Apparently becoming a rather general weed in Newfoundland, as elsewhere in eastern America. Mrs. Ayre gets it in old fields and waste places on the Avalon Peninsula. Our collection from the West Coast is from BONNE BAY: bushy margin of cultivated clearing, Middle Brook, *Fernald, Long & Fogg*, no. 1287.

SPHENOPHOLIS PALLENS (Spreng.) Scribn. The northernmost station yet known in on BONNE BAY: limestone cliffs and talus, Tucker’s Head, *Fernald, Long & Fogg*, no. 1295.

DESCHAMPSIA ATROPURPUREA (Wahlenb.) Scheele. Additional station on the HIGHLANDS OF ST. JOHN: peat on quartzite slopes, head of Deep Gulch, Doctor Hill, *Fernald, Long & Fogg*, no. 1297.

*AGROSTIS ROSSAE Vasey. BONNE BAY: rocky soil, August 1, 1930, *K. P. Jansson*.

This is the first station in eastern America for a characteristic little species (with very short-tufted leaves and dense linear-cylindric panicles, with spikelets about 2 mm. long) of the cordilleran region from Wyoming and Colorado to British Columbia and California. Its discovery at Bonne Bay is a clear indication of the need of further work there. Our party of 1929 did not see it; neither did Mr. Jansson find many of the localized species seen by us. He made his center at Lomond and in his brief stay reached areas we did not visit.

THE VARIATIONS OF AGROSTIS BOREALIS.—The species generally known as *Agrostis borealis* Hartm. presents in eastern North America